## A NEW HETEROTHRIPS FOUND ON OAK (THYSANOPTERA, HETEROTHRIPIDAE).

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The genus *Heterothrips* is represented in the eastern part of the United States by less than a dozen described species, and the discovery of a new form in great abundance after so many years of collecting seems quite unusual.

## Heterothrips quercicola, new species.

*Female.*—Length (fully distended) 1.7 mm. Dark blackish brown, legs more distinctly blackened but with fore tibia lighter colored and pale yellowish apically and more or less along fore margin, mid and hind tibiae somewhat lightened apically, tarsi light yellowish; antenna dark brown, except that segment II is grayish yellow apically, III grayish yellow to second transverse incision, beyond which it is tinged with brown, and IV lighter brown than following segments.

Head about 1.4 times as wide as length (measured from front of eyes), widest forward of middle and with checks gently rounded; in dorsal aspect, with a few minute spines and with faint, transverse striae in front of ocelli and with distinct striae behind them; anterior ocellus less than one-half the diameter of a posterior ocellus; frontal costa with a deep V-shaped emargination; antennal segment I with a median, transverse, carinate line, segment III elongate, obconical, with the usual two incisions and lightly sclerotized bands at about basal one-fifth and three-eighths, respectively, II and IV each with a band of sensoria apically, that on IV in a light area, IV roundly tapering to base, V somewhat barrel shaped, VI to VIII with sides only very gently rounded, IX conical.

Prothorax with anterior and posterior margins almost straight, lateral margins rounded, pronotum with transverse anastomosing lines forming irregular polygons; mesonotum with close, strong, transverse lines anastomosing very sparsely except anteriorly; metanotum with close, concentric striae; forewings gray brown, with a light area extending from apex of anal lobe to the point where the basal spine on the hind vein is situated; costa, fore vein, and hind vein with about  $(29-)^1$  34, (20-) 24, and 14 (-15) spines respectively.

Abdominal terga II-VII laterally with sparse pubescence on transverse anastomosing lines, nearly free of pubescence medially; VIII with similar pubescence over entire surface except extreme median base; IX with similar pubescence on posterior two-thirds (forward to discal bristles), X bare; combs on segments I-V broadly interrupted medially, complete on VI-VIII; apical margins of terga II-V with a few slender spines medially; spines of combs with thick bases, the inner ones on terga I-V distinct or in part with irregularly coalesced bases, those outward coalesced into plates bearing six to eight spines, these plates much broader than long and the spines on them three to four times

<sup>&</sup>lt;sup>1</sup> Numbers in parentheses represent the range of unusual variation, those outside parentheses, the usual number.

as long as plates; segment 6 with similar plates at extreme sides bearing about five spines per plate; segment 7 with some of lateral spines with coalesced bases; sterna 11–V1 with marginal fringes which laterally are basally coalesced into plates with two to five spines, segment 10 above split open to circlet of spines.

Measurements (in microns): Head, length from front of eye 120, total length 128, greatest width 172; prothorax, median length 192, width 241; pterothorax, median length 272, width 316; forewing, length 860; ovipositor 292.

Antennae:									
	28	42	60	40	28	33	18	16	16

*Male.*—Length distended 1.20 mm. Similar to the female but third antenna segment tinged gray brown basad of transverse incision and light brown beyond, fourth antennal segment almost as dark in color as following segment; fringes of terga laterally only slightly and irregularly coalesced basally; tergum IX not fringed and without processes; sterna IV–VIII each with a subbasal, broadly elliptical, glandular area, that on sterna IV about  $24 \times 10 \mu$ ; sterna II–VIII with continuous fringes, the bristles of which have slightly enlarged bases.

Antennae (in microns):

1	2	3	4	5	6	7	8	9
24	36	58	40	26	29	16	15	15

Type locality.—Babylon, Long Island, N. Y.

*Type.*—Catalog No. 56445, United States National Museum. *Host.*—Quercus sp.

Described from 62 female and 17 male specimens, including holotype female and allotype male, on slides (and many females in alcohol), taken from the catkins of a scrub oak, probably *Q*. *marilandica*, May 3, 1938; 4 males beaten from pine, April 26, 1938; and 3 males and 1 female beaten from pine, May 3, 1938 (J. C. Crawford, collector).

Differs from all the known American species which have the abdominal fringes coalesced into plates by having the spines on the plates three to four times as long as the plates and the plates themselves transverse; all the previously known species have spines no longer than the plates except *pectinifer* Hd. which has them about one and one-half times the length of the plate but the plate itself as long as or longer than broad, and *vernus* Hd., which has the spines two to three times as long as the plate, the sixth antennal segment shorter than the fifth, and in the male has the glandular areas of the sterna small and only slightly elliptical, measuring about 14 X 8  $\mu$ .